

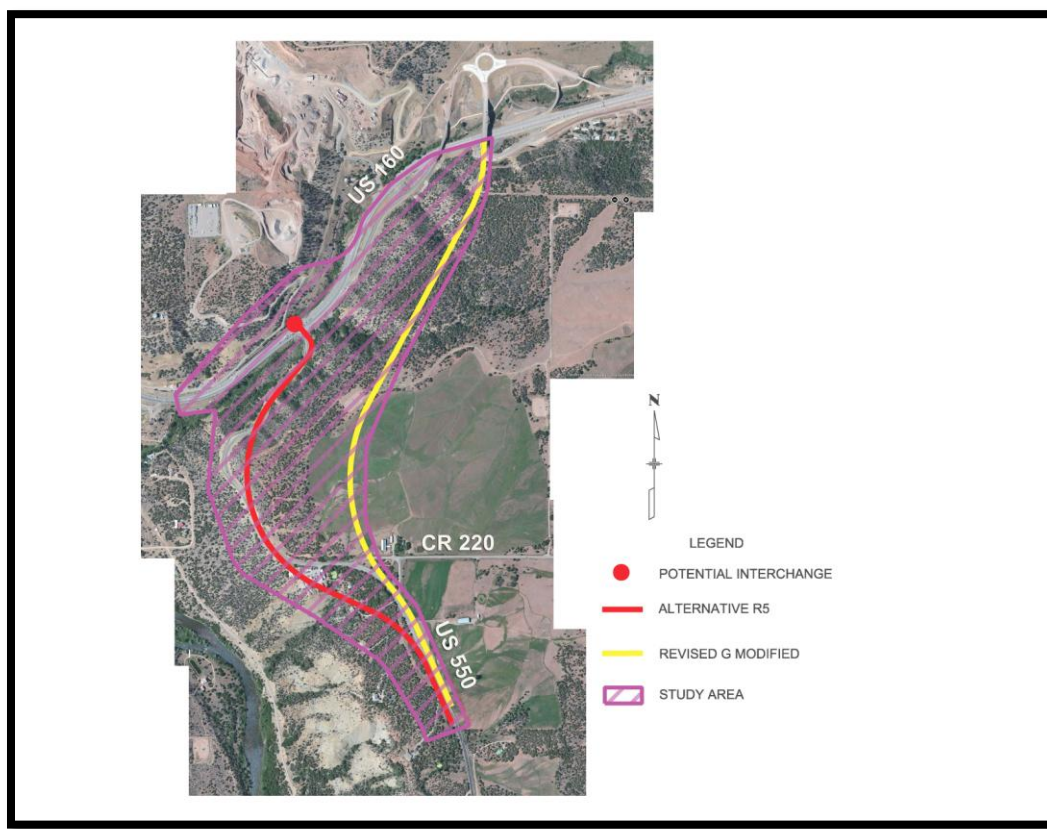
# 1 EXECUTIVE SUMMARY

## 1.1 PURPOSE OF THIS STUDY

The Colorado Department of Transportation (CDOT) has been planning and building improvements for US Highway 550 from the New Mexico state line to Durango, and for US Highway 160 from Bayfield to Durango, for close to 20 years. Various projects are in the planning, permitting, design, construction, or completed stages. One critical project is the south connection of US 550 to US 160. CDOT has already built the first phase of the Grandview interchange, which is their proposed connection point for US 550 and US 160.

A brief history of CDOT's previous planning and permitting efforts related to this section of highway is included in Chapter 2 of this report. In June 2012, CDOT issued the *US 550 South Connection to US 160 Supplemental Final Environmental Impact Statement/Section 4(f) Evaluation to the US Highway 160 From Durango to Bayfield EIS (2012 SFEIS)*. In that document, CDOT identified the Revised G Modified Alternative (RGM) as the preferred alternative. Due to controversy concerning this selection (see Chapter 2), CDOT decided to commission an in-depth independent alternatives analysis to find the best alternative to connect US 550 from just south of County Road 220 northward to US 160. The study area was roughly bounded by existing US 550 on the west and the RGM alignment on the east. See **Figure 1-1**.

**Figure 1-1: Study Area for US 550 South Connection to US 160: Independent Alternatives Analysis**



## 1.2 NEED TO BE INDEPENDENT

To avoid any further controversy, CDOT decided to have a truly independent analysis performed. They hired a consultant team comprising AMEC Environment & Infrastructure, Muller Engineering Company, and several specialty consultants to perform the independent analysis. Other than defining the study area (as shown above), CDOT let this design team decide its own course of action to determine its recommended solution. Therefore, the team developed the design criteria and design speed and decided how to analyze alternatives and compare results. The team was free to talk to stakeholders, review all previous data and reports, and determine how to use the available information. The team was also granted access to most private property within the study area and collected additional survey, geotechnical, and environmental data. The team was free to use its collective judgment to determine what was most important and how to put it to best use in developing a feasible solution that would meet all regulatory conditions as well as the needs of stakeholders and the traveling public. The alternative selected by the team is the result of this independent effort.

## 1.3 ALTERNATIVES STUDIED

The design team studied several alignment alternatives, and variations of those alternatives, in the initial screening process. Then, the team selected three alternatives—R5 (an alternative submitted by Webb Ranch, an important stakeholder), RGM, and RGM6 (a variation of RGM)—for more detailed study. Chapter 6 describes the engineering analysis for all of the alternatives studied. Chapter 7 evaluates the environmental impacts of the three alternatives selected for detailed analysis.

## 1.4 RECOMMENDED ALTERNATIVE

After exhaustive study, the design team is recommending design variation RGM6 as the best alternative to carry forward through permitting, design, and construction. RGM6 is illustrated in **Exhibit 6-26**. Highlights of the benefits of RGM6 are listed below:

- RGM6 connects to the Grandview interchange. The City of Durango and La Plata County support this connection, which is consistent with anticipated growth patterns and planning efforts.
- RGM6 (or more specifically, a very similar earlier version called RGM5) was universally supported by major stakeholders: the county, the city, local residents including the Piccolis (a family that owns a business and residence that would be relocated by the project), Christopher Webb (who owns Webb Ranch, a historic Section 4(f) property), and the Growth Fund Real Estate Group (the development subsidiary of the Southern Ute Indian Tribe and developers of the prominent Three Springs section of Durango).
- RGM6 is less costly and less complex to build than R5. The total estimated cost for RGM6 is \$91 million versus \$184 million for R5 and \$90 million for RGM.
- RGM6 could likely be built in one long construction season compared to two to three seasons for R5.
- RGM6 would be built largely away from traffic, with minimal disruption. R5 would be built immediately next to, and interspersed with, live traffic for the entire construction period, causing multiple years of inconvenience to the public. RGM6 will be safer to build than R5.
- Due to the incorporation of a roundabout south of US 160, RGM6 allows the ultimate four lanes of traffic over US 160 at the Grandview interchange to be accommodated using the existing bridge. The widened bridge required for RGM would not be required for RGM6.

- RGM6 has fewer adverse visual impacts than either RGM or R5. Because it is built into a cut just on the edge of Florida Mesa, it is obscured from view from the top of the mesa (from Webb Ranch and CR 220) and difficult to see from below (US 160). See Exhibits 5-2, 6-27 through 6-40, cross sections in Appendix C, and discussion in Chapter 7.
- RGM6 does not take residences or businesses. R5 takes three residences and one business.
- RGM and RGM6 have less wetland impacts than R5. RGM6 has slightly more wetland impacts than RGM but these additional impacts (ranch stock ponds) are to low value wetlands.
- RGM6 has significantly less direct impacts to Section 4(f) properties than RGM.

The design processes, assumptions, and conclusions are described in detail in the following chapters.